

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/008390

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12P13/08 C12R1/19  
 //(C12P13/08,C12R1:19)

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12P C12R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, FSTA, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DEBABOV V G: "The threonine story" ADVANCES IN BIOCHEMICAL ENGINEERING, BIOTECHNOLOGY, SPRINGER, BERLIN, DE, vol. 79, 2003, pages 113-136, XP008014933 ISSN: 0724-6145	34
Y	the whole document figure 2 page 124, lines 12-27	1-38
Y	DEBABOV V: "Construction of strains producing L-threonine" PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON THE GENETICS OF INDUSTRIAL MICROORGANISMS, TOKYO, JAPAN, 1982, pages 254-258, XP008031179 cited in the application the whole document	1-38
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

8 December 2004

Date of mailing of the international search report

22/12/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 025 169 A (KOYAMA YOSUKE ET AL) 15 February 2000 (2000-02-15) cited in the application column 1, line 33 - column 3, line 40 examples 1,2,4,6-9 figure 6 claim 1	1-33, 35-38
Y	EP 0 796 916 A (TRIPLE A B V) 24 September 1997 (1997-09-24) page 2, line 1 - page 3, line 46 examples 1,2 figure 2	1-33, 35-38
Y	SHIU-LAN L ET AL: "Study on the microfiltration of Escherichia coli-containing fermentation broth by a ceramic membrane filter" JOURNAL OF MEMBRANE SCIENCE, vol. 110, no. 2, 21 February 1996 (1996-02-21), pages 203-210, XP004041728 ISSN: 0376-7388 abstract page 203, left-hand column, line 1 - right-hand column, line 16 figure 2 paragraphs 2.2 and 3.3 figures 9,10,12	1-33, 35-38
Y	DE 101 03 778 A (DEGUSSA) 14 March 2002 (2002-03-14) paragraphs '0015! - '0017! examples 2,3 claims 1-6	1-33, 35-38
Y	WO 02/26993 A (LIAW HUNGMIN JAMES ; MAO WEIYING (US); YANG YUEQIN (US); BRADSHAW JIL) 4 April 2002 (2002-04-04) page 39, line 21 - page 40, line 27	1-33, 35-38
Y	TODA KIYOSHI: "Theoretical and methodological studies of continuous microbial bioreactors." JOURNAL OF GENERAL AND APPLIED MICROBIOLOGY, vol. 49, no. 4, August 2003 (2003-08), pages 219-233, XP008038115 ISSN: 0022-1260 abstract page 228, right-hand column, line 38 - page 229, left-hand column, line 15 table 2	1-33, 35-38
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	ZENG A-P: "Continuous culture" 1999, IN: "MANUAL OF INDUSTRIAL MICROBIOLOGY AND BIOTECHNOLOGY" (ED. DEMAIN A L ET AL), 2ND ED., ASM PRESS , WASHINGTON , XP002305534 ISBN: 1-55581-128-0 pages 151-164 figure 1	1-33, 35-38
A	----- OKAMOTO K ET AL: "Development of an industrially stable process for L-threonine fermentation by an L-methionine-auxotrophic mutant of Escherichia coli" JOURNAL OF BIOSCIENCE AND BIOENGINEERING, vol. 89, no. 1, 6 January 2000 (2000-01-06), pages 87-89, XP002305525 ISSN: 1389-1723 abstract	1
A	----- OKAMOTO K ET AL: "Hyperproduction of L-threonine by an Escherichia coli mutant with impaired L-threonine uptake" BIOSCIENCE BIOTECHNOLOGY BIOCHEMISTRY, vol. 61, no. 11, November 1997 (1997-11), pages 1877-1882, XP001018682 ISSN: 0916-8451 cited in the application abstract -----	1

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